

Cave Swallows: Historical Changes

In the twentieth century, cave swallows expanded north into the United States, first appearing in Florida as a vagrant in March 1890 (Scott 1890). The first nesting record in Florida was in 1987 (Smith *et al.* 1988). The first record from Texas was in 1910 (Bishop 1910). The first nesting in Texas was 1914 (Thayer 1914). The first record and the first nesting colony from New Mexico was in 1930 (Johnson 1960).

The Florida breeding population is limited to Dade County, but it is expected to expand northward (Robertson and Woolfenden 1992). Texas populations, once largely restricted to the Edwards Plateau area of south central Texas (Wolfe 1956), had reached Big Bend region by at least 1968 (Wauer and Davis 1972). Since that time, the species has moved into non-cave sites and has occupied many bridges and culverts to El Paso County in extreme west Texas (Lockwood *et al.* 1990, Lasley and Sexton 1992). Elsewhere in Texas, the species has followed highway bridges down through south Texas to areas 240 – 320km from Edwards Plateau, and eastward to beyond Houston. The species is now widespread along Interstates 10 and 20 in west Texas, and north to the Concho Valley area west of San Angelo (Palmer 1988, Lasley and Sexton 1991a).

The New Mexico population is largely restricted to the Guadalupe Mountains of Eddy County and surrounding lowlands (West 1988). Sightings in September of 1992 in Dona Ana County north of El Paso, Texas, probably indicate a natural range expansion into that area. Birds at this site were first noted nesting in 1993 (Williams 1993).

One of two individuals summered at a cliff swallow colony in Tucson, Arizona, for several years (1979 - 1987), with a pair nesting in 1983. A cave swallow x cliff swallow pair in 1985 was unsuccessful (K. Kaufman personal communication).

Vagrants have been reported from many areas, including Alabama (Imhof 1987), Louisiana (Imhof 1988), Mississippi (Toups and Jackson 1987), Nebraska (Brown and Brown 1992), New Jersey (Boyle *et al.* 1990), New York (Boyle *et al.* 1990), North Carolina (LeGrand 1992), Nova Scotia (American Ornithological Union 1983), Ontario (Weir 1989), Barbados (Norton 1991), Cayman Islands. (Bradley 1985), St. Lucia (Norton 1991), Virgin I. (American Ornithological Union 1983) and Curacao (Voous 1983). Most of the records are based on sight records, including specimens from Alabama (Imhof 1987), Mississippi (Toups and Jackson 1987) and Nova Scotia (American Ornithological Union 1983) and diagnostic photos from several other areas. The first of four Nova Scotia records goes back to 1986, but most extralimital records have been more recent, perhaps reflecting the expanding population and range, or perhaps simply more efficient coverage by birders.

There are no fossil records for living species. A paleospecies from the early Blancan (North American Land Mammal Age, 3.3 - 3.5 Megannum) of Meade County, Kansas, *Hirundo aprica*, was similar osteologically to barn swallows (*H. rustica*) but larger. A generic assignment is still tentative (Feduccia 1967).